



## Complete Summary

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### TITLE

Perinatal care: percentage of nulliparous women with a term, singleton baby in a vertex position delivered by Cesarean section.

### SOURCE(S)

Specifications manual for Joint Commission National Quality Core Measures [Version 2010A2]. Oakbrook Terrace (IL): The Joint Commission; 2010 Jan. 335 p.

## Measure Domain

### PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

## Brief Abstract

### DESCRIPTION

This measure is used to assess the percentage of nulliparous women delivering a live singleton infant in vertex presentation who undergo Cesarean section.

### RATIONALE

The removal of any pressure to not perform a cesarean birth has led to a skyrocketing of hospital, state and national Cesarean section (CS) rates. Some hospitals now have CS rates over 50%. Hospitals with CS rates at 15-20% have infant outcomes that are just as good and better maternal outcomes (Gould, et al., 2004). There are no data that higher rates improve any outcomes, yet the CS rates continue to rise. This measure seeks to focus attention on the most variable portion of the CS epidemic, the term labor CS in nulliparous women. This population segment accounts for the large majority of the variable portion of the CS rate, and is the area most affected by subjectivity.

As compared to other CS measures, what is different about nulliparous term singleton vertex (NTSV) CS rate (Low-risk Primary CS in first births) is that there are clear cut quality improvement activities that can be done to address the differences. Main, et al. (2006) found that over 60% of the variation among hospitals can be attributed to first birth labor induction rates and first birth early labor admission rates. The results showed if labor was forced when the cervix was not ready the outcomes were poorer. Alfirevic, et al., (2004) also showed that labor and delivery guidelines can make a difference in labor outcomes. Many authors have shown that physician factors, rather than patient characteristics or obstetric diagnoses are the major driver for the difference in rates within a hospital (Berkowitz, et al., 1989; Goyert, et al., 1989; Luthy, et al., 2003). The dramatic variation in NTSV rates seen in all populations studied is striking according to Menacker (2006). Hospitals within a state (Coonrod, et al., 2008; California Office of Statewide Hospital Planning and Development [OSHDP], 2007) and physicians within a hospital (Main, 1999) have rates with a 3-5 fold variation.

## **PRIMARY CLINICAL COMPONENT**

Cesarean section

## **DENOMINATOR DESCRIPTION**

Nulliparous patients delivered of a live term singleton newborn in vertex presentation (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

## **NUMERATOR DESCRIPTION**

Patients with Cesarean sections (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

## **Evidence Supporting the Measure**

### **EVIDENCE SUPPORTING THE CRITERION OF QUALITY**

- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## **Evidence Supporting Need for the Measure**

### **NEED FOR THE MEASURE**

Use of this measure to improve performance

### **EVIDENCE SUPPORTING NEED FOR THE MEASURE**

AHRQ quality indicators. Guide to inpatient quality indicators: quality of care in hospitals -- volume, mortality, and utilization [version 2.1, revision 4]. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2004 Dec 22. 183 p.(AHRQ Pub; no. 02-R0204).

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## State of Use of the Measure

### STATE OF USE

Current routine use

### CURRENT USE

Accreditation

Collaborative inter-organizational quality improvement

Internal quality improvement

## Application of Measure in its Current Use

### **CARE SETTING**

Hospitals

### **PROFESSIONALS RESPONSIBLE FOR HEALTH CARE**

Measure is not provider specific

### **LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED**

Single Health Care Delivery Organizations

### **TARGET POPULATION AGE**

8 years to 64 years

### **TARGET POPULATION GENDER**

Female (only)

### **STRATIFICATION BY VULNERABLE POPULATIONS**

Unspecified

## Characteristics of the Primary Clinical Component

### **INCIDENCE/PREVALENCE**

See the "Rationale" field.

### **ASSOCIATION WITH VULNERABLE POPULATIONS**

Unspecified

### **BURDEN OF ILLNESS**

See the "Rationale" field.

### **UTILIZATION**

Unspecified

### **COSTS**

Unspecified

## Institute of Medicine National Healthcare Quality Report Categories

### IOM CARE NEED

Staying Healthy

### IOM DOMAIN

Safety

## Data Collection for the Measure

### CASE FINDING

Users of care only

### DESCRIPTION OF CASE FINDING

Nulliparous patients delivered of a live term singleton newborn in vertex presentation

### DENOMINATOR SAMPLING FRAME

Patients associated with provider

### DENOMINATOR INCLUSIONS/EXCLUSIONS

#### Inclusions

Nulliparous patients with *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes* for outcome of delivery as defined in Appendix A, Table 11.08 of the original measure documentation and with a delivery of a newborn with 37 weeks or more of gestation completed

#### Exclusions

- *ICD-9-CM Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes* for contraindications to vaginal delivery as defined in Appendix A, Table 11.09 of the original measure documentation
- Less than 8 years of age
- Greater than or equal to 65 years of age
- Length of Stay greater than 120 days
- Enrolled in clinical trials

### RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

### DENOMINATOR (INDEX) EVENT

Clinical Condition  
Institutionalization  
Therapeutic Intervention

#### **DENOMINATOR TIME WINDOW**

Time window brackets index event

#### **NUMERATOR INCLUSIONS/EXCLUSIONS**

##### **Inclusions**

*International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Principal Procedure Code or ICD-9-CM Other Procedure Codes* for Cesarean section as defined in Appendix A, Table 11.06 of the original measure documentation

##### **Exclusions**

None

#### **MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS**

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

#### **NUMERATOR TIME WINDOW**

Institutionalization

#### **DATA SOURCE**

Administrative data  
Medical record

#### **LEVEL OF DETERMINATION OF QUALITY**

Individual Case

#### **PRE-EXISTING INSTRUMENT USED**

Unspecified

### **Computation of the Measure**

#### **SCORING**

Rate

**INTERPRETATION OF SCORE**

Better quality is associated with a lower score

**ALLOWANCE FOR PATIENT FACTORS**

Unspecified

**STANDARD OF COMPARISON**

Internal time comparison

**Evaluation of Measure Properties****EXTENT OF MEASURE TESTING**

Unspecified

**Identifying Information****ORIGINAL TITLE**

Cesarean section.

**MEASURE COLLECTION**

[National Quality Core Measures](#)

**MEASURE SET NAME**

[Perinatal Care](#)

**DEVELOPER**

Joint Commission, The

**FUNDING SOURCE(S)**

No external funding was received.

**COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE**

The Perinatal Care Technical Advisory Panel (PC TAP) recommended which NQF-endorsed Perinatal Care measures should be included in the set. Members of the PC TAP are enumerated at:

<http://www.jointcommission.org/PerformanceMeasurement/PerformanceMeasurement/Perinatal+Care+Core+Measure+Set.htm>.

**FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST**



Expert panel members have made full disclosure of relevant financial and conflict of interest information in accordance with National Quality Forum (NQF) and The Joint Commission's Conflict of Interest policies, copies of which are available upon written request to The Joint Commission.

## **ADAPTATION**

This Perinatal Care measure has been adapted from a National Quality Forum (NQF)-endorsed measure.

## **PARENT MEASURE**

Cesarean Rate for Low-risk First Birth Women (aka NTSV CS Rate) [California Maternal Quality Care Collaborative]

## **RELEASE DATE**

2009 Oct

## **REVISION DATE**

2010 Jan

## **MEASURE STATUS**

This is the current release of the measure.

## **SOURCE(S)**

Specifications manual for Joint Commission National Quality Core Measures [Version 2010A2]. Oakbrook Terrace (IL): The Joint Commission; 2010 Jan. 335 p.

## **MEASURE AVAILABILITY**

The individual measure, "Cesarean Section," is published in "Specifications Manual for Joint Commission National Quality Core Measures [Version 2010A2]." This document is available from the [The Joint Commission Web site](#).

## **NQMC STATUS**

This NQMC summary was completed by The Joint Commission on January 15, 2010 and reviewed accordingly by ECRI Institute on February 8, 2010.

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